

Columbia University Bulletin

SERIES 60

NUMBER 2

JANUARY 9, 1960

THE FACULTY OF MEDICINE

*Courses in
Physical
Therapy and
Occupational
Therapy*

1960-1961

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Academic Calendar, 1960-1961

AUTUMN TERM

- Sept 26-28** Monday-Wednesday. Registration, including payment of fees.*
- 29** **Thursday. Classes begin.**
- Oct 8** Saturday. Last day for making changes in programs.
- 26** Wednesday. Award of October degrees and certificates.
- Nov 8** Tuesday. Election Day. Holiday.
- 24-27** **Thursday-Sunday. Thanksgiving Holidays.**
- Dec 1** Thursday. Last day for filing application or renewal of application for degrees and certificates to be awarded in February.†
- 21** **Wednesday, through January 3, 1961, Tuesday. Christmas Holidays.**
- Jan 23** Monday, through February 2, Thursday. Midyear examinations.
- Feb 2** Thursday. Term ends.

SPRING TERM

- Feb 6-7** Monday-Tuesday. Registration, including payment of fees.*
- 8** Wednesday. Classes begin.
- 18** Saturday. Last day for making changes in programs.
- 22** Wednesday. Award of February degrees and certificates.
- Mar 1** Wednesday. Last day for filing application or renewal of application for degrees and certificates to be awarded in June.†
- Apr 1** **Saturday at noon, through April 9, Sunday. Spring Holidays.**
- May 22** Monday, through June 1, Thursday. Final examinations.
- June 1** Thursday. Term ends.

COMMENCEMENT

- June 4** Sunday. Baccalaureate Service.
- 6** **Tuesday. Conferring of degrees and certificates.**
- Aug 1** Tuesday. Last day for filing application or renewal of application for degrees and certificates to be awarded in October.†

* Students allowed to register after the period specified must pay a late fee.

† Students who file application after this date must pay a late fee.

Columbia University

Department of Physical Medicine and Rehabilitation

Courses in
Physical Therapy and
Occupational Therapy
1960-1961

Grayson Kirk, Ph.D., LL.D. *President of the University*

John A. Krout, Ph.D., L.H.D., LL.D. *Vice-President of the University*

Jacques Barzun, Ph.D. *Dean of Faculties and Provost of the University*

H. Houston Merritt, M.D. *Vice-President in Charge of Medical Affairs;
Dean of the Faculty of Medicine*

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Columbia University Bulletin • Series 60 • Number 2 • January 9, 1960

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Courses in Physical Therapy

CHAIRMAN OF THE DEPARTMENT OF PHYSICAL MEDICINE AND REHABILITATION:

Robert C. Darling, M.D.

MEDICAL DIRECTOR: William Benham Snow, M.D.

DIRECTOR: Mary E. Callahan, M.A.

ASSOCIATE DIRECTOR: Ruth Dickinson, M.A.

Physical therapy is the treatment of disease and injury by the use of such agents as sunshine, water, exercise, massage, mechanical forces, and electricity. Functional rehabilitation of persons injured by disease or accident is a pressing medical need; the skillful application of physical therapy following injury will do much to shorten the time of disability. The ultimate aim of any treatment is the maximal rehabilitation and adjustment of the patient. The success of this type of treatment is dependent upon the therapist's knowledge, care, and precision in the administration of the intelligent medical prescription.

The program of study described here gives the student a basic knowledge of the normal functions of the human body and of the pathology of those diseases and injuries in which physical therapy can be helpful in the optimum rehabilitation of the patient. In addition to theoretical classroom instruction and demonstrations, students observe treatment procedures and receive practice in teaching hospitals under University supervision. The curriculum is planned to serve the educational needs of students working toward the Bachelor of Science degree or toward the Certificate of Proficiency in Physical Therapy.

The Bachelor of Science degree is offered upon satisfactory completion of the full junior and senior program, which includes clinical experience. This program is superimposed upon two years of college work in liberal arts with a minimum of sixty semester credits including the proper science prerequisites.

The Certificate of Proficiency in Physical Therapy is offered upon satisfactory completion of the programs (academic and clinical) prescribed for students of advanced standing. This program is superimposed upon the background of either a Bachelor's degree from an accredited college or university or graduation from a nationally accredited professional school of nursing.

Graduates of either program will have had a minimum of four years' post-secondary education study including special professional courses in physical therapy. Minimum standards for approved schools of physical therapy are set by the American Medical Association through the Council on Medical Education and Hospitals. Graduates of either program are eligible for admission to the examination of the American Registry of Physical Therapists and for membership in the American Physical Therapy Association.

Many states require licensing or registration of physical therapists, for which examinations are usually held at intervals during the year. A student should become

familiar with the requirements in his state so that any required examination may be taken as soon as possible after graduation. In New York State the law requires that a graduate must pass the qualifying examination, conducted by the Department of Education of the State of New York. This examination is usually held in July and December of each year. According to the law in New York State only those persons who are citizens or who have filed intentions of becoming citizens of this country may be considered for admission to the examination.

ADMISSION REQUIREMENTS

Students are admitted only in September. In subjects taken at other institutions for which transfer credit is allowed, a grade of C or better is required. The ability to swim is required for both programs of study in the second term. Students unable to swim at the time of admission are responsible for securing instruction for themselves before the second term. Applicants for admission must be graduates of approved high schools or the equivalent, and then must satisfy *one* of the following:

FOR THE DEGREE PROGRAM

The completion of at least sixty semester credits (two years) of liberal arts courses in a college approved by Columbia University. Courses must include: (a) 6 semester credits in biology; (b) 4 semester credits in chemistry or physics (preferably both); (c) 6 semester credits in English; and (d) 6 semester credits in psychology.* Elective courses in foreign languages, literature, humanities, social sciences, natural sciences are recommended. Students who have had a balanced education are preferred.

FOR THE CERTIFICATE PROGRAM

Graduation from an approved college with at least a Bachelor of Science or Bachelor of Arts degree, the undergraduate work to include: (a) 8 semester credits in biological science; (b) 6 semester credits in physics or chemistry (preferably both); (c) 10 semester credits in social science (of which 6 must be in psychology). *Or:*

Graduation from a nationally accredited professional school of nursing with courses carrying college credit in the biological and physical sciences. Courses in the humanities and social sciences are a desirable background.

ADMISSION PROCEDURE

Application forms may be obtained by writing to the Physical Therapy Office, College of Physicians and Surgeons, 630 West 168th Street, New York 32, N.Y., and should be filed by June 1 preceding the academic year in which the student wishes to begin his studies. The completed form must be accompanied by the application fee: \$10 if the application is received before July 1, 1960; \$15 if the application is received on or after July 1, 1960. This fee is not returnable and is not credited toward tuition. Transcripts of all post-secondary education should be forwarded by the registrars of the respective schools direct to the Director of Courses in Physical Therapy.

A personal interview will be arranged for each applicant.

* Requirements for admission to the licensure examination for physical therapists in the state of New York include 6 semester credits in biology, 6 in chemistry, and 6 in physics. Three of the required credits in physics will be earned during the study of physical therapy at Columbia. Students who plan to practice in New York State should accordingly fulfill the remainder of these requirements before coming to Columbia.

Officers of Instruction

Gustav J. Beck. *Instructor in Medicine*
B.S., Columbia; M.D., New York University

Shivaji B. Bhonslay. *Instructor in Surgery*
M.D., American University, Beirut

Signe Brunnstrom. *Instructor in Physical Therapy*
B.S., Uppsala College, Sweden; M.A., New York University; Physical Therapy, Royal Gymnastic Central Institute, Sweden

Lee H. Cairns. *Instructor in Physical Therapy*
A.B., Smith; Certificate in Physical Therapy, Columbia

Mary E. Callahan. *Associate Professor of Physical Therapy*
B.S., New York University; M.A., Columbia; Graduate, Clinton Hospital School of Nursing; Certificate in Physical Therapy, Posse Institute

Shu Chien. *Assistant Professor of Physiology*
M.B., National Taiwan; Ph.D., Columbia

Frederick S. Craig. *Assistant Professor of Clinical Orthopedic Surgery*
M.D., Buffalo

George F. Crickelair. *Associate Professor of Clinical Surgery*
A.B., M.D., Wisconsin

Robert C. Darling. *Professor of Physical Medicine and Rehabilitation*
A.B., M.D., Harvard

Ruth Dickinson. *Assistant Professor of Physical Therapy*
B.S., Russell Sage; M.A., Certificate in Physical Therapy, Columbia

Herbert O. Elftman. *Associate Professor of Anatomy*
A.B., M.A., California; Ph.D., Columbia

Dorothy H. Ericson, O.T.R. *Associate in Occupational Therapy*
B.S. in Occupational Therapy, Kansas; M.A., Columbia

Patricia N. Farnsworth. *Assistant in Physiology*
A.B., Morningside; M.S., Columbia

Samuel B. Feitelberg. *Instructor in Physical Therapy*
B.S., M.A., Certificate in Physical Therapy, Columbia

Marie Louise Franciscus, O.T.R. *Associate Professor of Occupational Therapy*
B.S., Ohio State; M.A., Columbia; Graduate, Philadelphia School of Occupational Therapy

Alfred Gallinek. *Associate in Neurology*
M.D., Berlin

A. David Gurewitsch. *Associate Clinical Professor of Rehabilitation Medicine*
M.D., Basel

Morton Hoberman. *Associate Clinical Professor of Physical Medicine and Rehabilitation*
B.S., New York University; M.B., M.D., Wayne

Marion D. Laird. *Associate in Obstetrics and Gynecology*
B.A., Queens (Ontario); M.D., Toronto

David R. Lyons. *Instructor in Psychiatry*
A.B., M.D., George Washington

Harrison L. McLaughlin. *Professor of Clinical Orthopedic Surgery*
M.D., C.M., Queens (Ontario)

J. Lowry Miller. *Associate Clinical Professor of Dermatology*
A.B., North Carolina; M.D., Pennsylvania

Charles R. Noback. *Associate Professor of Anatomy*
B.S., Cornell; M.S., New York University; Ph.D., Minnesota

John F. O'Connor. *Instructor in Psychiatry*
B.S., Columbia; M.D., State University of New York, College of Medicine

Isabel Robinault, O.T.R. *Associate in Occupational Therapy*
A.B., Barnard; M.A., Certificate in Occupational Therapy, New York University; Ph.D., Columbia

Katherine T. San Julian. *Associate in Physical Therapy*
A.B., New York University; M.A., Certificate in Physical Therapy, Columbia

Martha E. Schnebly, O.T.R. *Assistant Professor of Occupational Therapy*
B.S., Maryland State Teachers College; Certificate in Occupational Therapy, Columbia

Daniel Sciarra. *Associate Professor of Clinical Neurology*
A.B., M.D., Harvard

William Benham Snow. *Professor of Physical Medicine*
M.D., Long Island College of Medicine

Blanche Talmud. *Instructor in Physical Therapy*
B.S., Certificate in Physical Therapy, New York University

Lawrence H. Wisham. *Assistant Clinical Professor of Physical Medicine and Rehabilitation*
B.S., New York University; M.D., Chicago

John A. Wood. *Assistant in Medicine*
A.B., M.D., Harvard

Shyh-Jong Yue. *Assistant Professor of Physical Medicine and Rehabilitation*
M.D., National College of Medicine, Shanghai

SPECIAL LECTURERS

Arthur Abramson. *Chairman, Department of Rehabilitation Medicine, Yeshiva*
B.S., M.D., C.M., McGill

Olav Austlid. *Acting Director, Physical Medicine, Hospital for Special Surgery*
M.D., Vienna

Irma Bartenieff. *Research Assistant to Dr. Gurewitsch*
Certificate in Physical Therapy, New York University

Elizabeth M. Carrick. *Instructor, New York School of Social Work*
B.S., Ohio State; M.A., New York School of Social Work

Theodore Corbitt. *Assistant in Physical Therapy, Institute for the Crippled and Disabled*
B.S., Cincinnati; M.A., Certificate in Physical Therapy, New York University

Jon Eisenson. *Lecturer in Otolaryngology*

A.B., College of the City of New York; M.A., Ph.D., Columbia

Minnie M. Genn. *Pediatric Psychiatric Clinic*

B.S., Boston University; Ed.D., Harvard

Richard J. Glavin. *Chief Resident, New York State Psychiatric Institute*

A.B., Cornell; M.D., Rochester

Charles R. Goldstine. *Director, Prosthetic and Orthopedic Appliance Shops, Institute for the Crippled and Disabled*

Margery Gross. *Chief, Cerebral Palsy Clinic, Institute for the Crippled and Disabled*

A.S., New Haven Junior College; Certificate in Physical Therapy, Hospital for Special Surgery

Edward F. Hartung. *Assistant Clinical Professor of Medicine, New York University Post-Graduate Medical School*

A.B., M.D., Columbia

Helen Hennessy. *Orthopedic Consultant and Supervisor of Physical Therapy, Visiting Nurse Service of New York*

Graduate, Yale School of Nursing; B.S., Columbia; Certificate in Physical Therapy, Hospital for the Ruptured and Crippled

Shulamith Kastein. *Speech Pathologist, Department of Otolaryngology, Columbia-Presbyterian Medical Center*

Diploma, Vienna

Jacob Meislin. *Chief, Physical Medicine and Rehabilitation, Franklin Delano Roosevelt Hospital*

B.S., College of the City of New York; M.D., Lausanne

Adam Munz. *Clinical Psychologist, Cerebral Palsy Clinic, Presbyterian Hospital*

A.B., Hunter; M.A., New York University

Joseph E. Snyder. *Assistant Vice-President, Presbyterian Hospital*

A.B., Nebraska; M.D., Pennsylvania

Program of Study

Degree candidates take the entire program of courses listed below. Certificate candidates take only the starred courses. Both curricula are outlined on page 12.

Degree candidates should consult the bulletins of Teachers College and the School of General Studies for suitable electives.

The University reserves the right to withdraw or modify these courses or to change the instructors as may be necessary.

JUNIOR YEAR: AUTUMN TERM

*Anatomy 155. Human anatomy

Professors Elftman and Noback. 3 points.

Anatomy of the human body, with emphasis on those features which are most important for muscular activity. Instruction is given by means of lectures and laboratory work, the latter being based on prepared dissection of the human body.

*Kinesiology 105. Applied anatomy and kinesiology

Miss Brunnstrom and others. 2 points.

Application of knowledge of gross anatomy of skeletal and muscular systems to mechanics of bodily movement. Analysis of skills used in daily activities and other activities in physical and occupational therapy. Lectures and laboratory.

*Massage 3. Essentials of massage and techniques of relaxation

Professors Callahan and Gurewitsch, Mrs. Bartenieff, and Miss Cairns. 2 points.

The theory and technique of massage and relaxation, with demonstration and practice.

*Nursing Procedures 17. Bandaging and dressings

Miss Cairns. 1 point.

The techniques of bandaging, asepsis, handling of dressings, and bedside conduct.

*Orientation 39. Professional ethics and institutional organization

Professor Snow. 1 point.

Lectures on the conduct of medical assistants which is appropriate to the routine of their work. Orientation of medical workers toward institutional contacts.

*G.S. Physics A1. Topics in elementary physics

Instructor to be announced. 3 points.

Two hours of lecture and three hours of laboratory each week. A thorough treatment of several selected topics.

*Physiology 55 or 157. Human physiology

Mrs. Farnsworth (55) and Dr. Chien (157). 2 points.

A comprehensive discussion of the major organ systems of the human body and their functions, with emphasis on the physiology of exercise. Students with a minimum background of course work in biology, chemistry, and physics register for *Physiology 55*. Those who have had a comprehensive physiology course and considerable course work in biology, chemistry, and physics register for *Physiology 157*.

Psychology 41. Child development

Dr. Lyons. 2 points.

The mental, motor, social, and emotional development of the child. Special attention is given to a consideration of stress situations encountered by the child and his methods of handling them.

JUNIOR YEAR: SPRING TERM**Clinical Experience 2. Introduction to clinical practice**

2 points.

Orientation to institutions, physical therapy departments, and patients; to record-keeping and to giving massage and exercise.

***Exercise 112. Therapeutic exercise, including underwater techniques**

Professors Snow, Darling, Hoberman, and associates. 2 or 4 points.

The basic principles of therapeutic exercise, including physiology of exercise, muscle evaluation and re-education, tests and measurements, and underwater exercises. Lectures and laboratory.

***Orthopedics 136. Orthopedics**

Professor Craig. 2 points.

Lectures and clinical presentations which are descriptive of orthopedic conditions, including discussion of related problems—social, medical, surgical, and rehabilitation.

***Psychiatry 102. Elementary psychiatry**

Dr. O'Connor, Mr. Munz, and others. 3 points.

Etiology and symptomatology of the major and minor psychoses, including the psychoneuroses and their treatment. Lectures with clinical demonstrations and field trips. Work for the third point includes a survey of psychological tests and measurements, and the interpretation of their results for the physical and occupational therapist.

***Thermo- and Hydrotherapy 10.**

Professor Darling and Miss Cairns. 2 points.

The physiology of heat balance in the human body and of the effects of application of external heat or cold to the body. Theory and technique of application of heat or cold. The electromagnetic spectrum of radiant energy, especially as it applies to therapeutic heat. Theory and technique of the use of water and other liquids in therapy.

Elective (2 points).

Chosen with the approval of the adviser.

SUMMER

Degree candidates spend ten weeks (June, July, and part of September) in full-time clinical practice at one or more of the affiliated hospitals (see pages 13–14). They attend lectures, clinics, and staff meetings, receive supervised practical experience in physical therapy, and are introduced to related treatment departments.

Certificate candidates have a similar experience for four months (June, July, August, and September).

SENIOR YEAR: AUTUMN TERM**Clinical Experience 3. Supervised clinical practice**

2 points.

Lectures, observation, demonstrations, and supervised practice in various clinics of physical medicine and rehabilitation.

***Clinical Subjects 101. General medicine and surgery**

Drs. Bhonslay and Wood. 2 points.

General Medicine (Dr. Wood): a survey of the more common diseases with emphasis on pulmonary tuberculosis and cardiac disorders. Lectures deal primarily with the relationship of pathological physiology to the development of signs and symptoms of disease.

General Surgery (Dr. Bhonslay): a survey of those common diseases for which there is surgical emphasis.

***Neuroanatomy 95. Anatomy of the nervous system**

Professor Sciarra. 2 points.

Anatomy of the nervous system of man, including the structural unit, the cerebrospinal system, and the autonomic system. Attention will be given to the gross divisions of the brain, spinal cord, and peripheral nerves, with particular emphasis on the controls affecting voluntary motion.

Orientation 41. Seminar on social work and human behavior

Mrs. Carrick. 1 point.

Orientation to social work as related to what we learn about human behavior and its relationship to physical therapy.

***Pathology 31. Elementary studies in pathology**

Instructor to be announced. 1 point.

Lectures to outline the basic alterations which occur in body tissues due to injury and disease; alterations of function resulting from these influences.

Psychiatry 101. Psychosomatic aspects of physical medicine

Dr. Glavin. 1 point.

A consideration of the emotional aspects of all disease.

Speech 163. Principles and practice of speech science

Dr. Eisenson. 2 points.

This course covers the basic anatomy and physiology underlying speech science. Consideration will be given to the pathology of speech abnormalities and the therapeutic approach to their correction.

Elective (3 points).

In English, communication skills, or public speaking and discussion.

Elective (2 points).

Chosen with the approval of the adviser.

SENIOR YEAR: SPRING TERM

***Clinical Applications 130. Survey of medical and surgical conditions in relation to physical medicine**

Professor Snow and associates. 2 points.

This course gives the student a clear acquaintance with disease as it occurs in the practice of physical medicine. Specialists discuss the problems in their fields of practice, including particular pathology and the needs of physical medicine. This analysis is followed by prescriptive physical therapy to cover these special indications. There will be further clinical practice in hospitals.

Clinical Experience 4. Supervised clinical experience

2 points.

Continuation of *Clinical Experience 3*.

***Electrotherapy 14. Theory and practice of electrotherapy**

Dr. Wisham. 2 points.

Theory and principles of technique of the diagnostic and therapeutic uses of high-frequency, galvanic, and other low-frequency currents.

Kinesiology 205. Advanced kinesiology

Miss Brunnstrom and others. 2 points.

Review and discussion of selected readings from the works of outstanding classical anatomists, recent electromyographic findings elucidating principles of erect standing, fundamentals of locomotion, and introduction to the study of the motor behavior of patients with upper motor neuron lesions. Application to therapeutic procedures is stressed.

Open also to graduate occupational therapists, physical therapists, and physicians. See page 11.

***Neurology 106. Clinical neurology**

Dr. Gallinek. 2 points.

Etiology, symptomatology, and treatment in diseases of the brain, spinal cord, and peripheral nerves.

***Orientation 16. Seminar**

Professors Callahan, Dickinson, and Schnebly. 1 or 2 points.

Lecture and discussion of topics of importance to the therapist in practice, including organization and administration of departments of physical therapy; job placement and recent developments in physical medicine. Seniors will register for 2 points, which will include a general survey of occupational therapy, with emphasis on theoretical principles as applied to major disability areas.

Physical Therapy 116. Practical application of physical therapy

Professor Snow and associates. 2 points.

Integration and application to specific cases of the fundamental principles and skills already learned.

***Rehabilitation 150. Rehabilitation techniques and problems of the handicapped**

Miss Talmud. 2 points.

Theory, practice, and evaluation of functional activities; types, application, and care of supportive apparatus. Lectures and demonstrations.

Elective (2 points).

Chosen with the approval of the adviser.

► POSTGRADUATE COURSE IN KINESIOLOGY**Kinesiology 205 (spring term).**

Miss Brunnstrom. Saturday, 10–12. 2 points.

Registration only by permission of the instructor. Minimum class, ten; maximum class, twenty.

An advanced course designed for occupational therapists, physical therapists, and physicians who are graduates of professional schools acceptable to Columbia University. Review and discussion of selected readings from the works of outstanding classical anatomists, recent electromyographic findings elucidating principles of erect standing, fundamentals of locomotion, and introduction to the study of the motor behavior of patients with upper motor neuron lesions. Application to therapeutic procedures will be stressed.

Further information and application forms are available from the Office of Postgraduate Courses, College of Physicians and Surgeons, 630 West 168th Street, New York 32, N. Y.

Outline of the Program

DEGREE PROGRAM: 65 POINTS

JUNIOR YEAR: AUTUMN TERM

Anatomy 155	3
Kinesiology 105	2
Massage 3	2
Nursing Procedures 17	1
Orientation 39	1
Physics course	3 or 4
Physiology 55 or 157	2
Psychology 41	2
Total points	16 or 17

SENIOR YEAR: AUTUMN TERM

Clinical Experience 3	2
Clinical Subjects 101	2
Neuroanatomy 95	2
Orientation 41	1
Pathology 31	1
Psychiatry 101	1
Speech 163	2
Electives	5
Total points	16

JUNIOR YEAR: SPRING TERM

Clinical Experience 2	2
Exercise 112	4
Orthopedics 136	2
Psychiatry 102	3
Thermo- and Hydrotherapy 10	2
Elective	2
Total points	15

SENIOR YEAR: SPRING TERM

Clinical Applications 130	2
Clinical Experience 4	2
Electrotherapy 14	2
Kinesiology 205	2
Neurology 106	2
Orientation 16	2
Physical Therapy 116	2
Rehabilitation 150	2
Elective	2
Total points	18

CLINICAL OBSERVATION, INSTRUCTION, AND SUPERVISED PRACTICE: in June, July, and September between the junior and senior years.

CERTIFICATE PROGRAM: 38 POINTS

AUTUMN TERM

Anatomy 155	3
Clinical Subjects 101	2
Kinesiology 105	2
Massage 3	2
Neuroanatomy 95	2
Nursing Procedures 17	1
Orientation 39	1
Pathology 31	1
Physics course	3
Physiology 55 or 157	2
Total points	19

SPRING TERM

Clinical Applications 130	2
Electrotherapy 14	2
Exercise 112	4
Neurology 106	2
Orientation 16	1
Orthopedics 136	2
Psychiatry 102	2
Rehabilitation 150	2
Thermo- and Hydrotherapy 10	2
Total points	19

CLINICAL INSTRUCTION AND SUPERVISED EXPERIENCE: in June, July, August, and September following completion of the course work.

Hospitals Affiliated for Clinical Practice

Attendance in the hospitals and clinics listed below is concurrent with regular classroom work in the autumn and spring terms. In addition, all students are required to spend a period during the summer in full-time clinical practice. During this period students attend lectures, clinics, and staff meetings, receive supervised practical experience in physical therapy, and are introduced to related treatment departments.

BLYTHEDALE, VALHALLA, N.Y.

W. H. Kelley. *Executive Director*
A. David Gurewitsch, M.D. *Medical Director*
Carroll Wardlaw. *Head Physical Therapist*

BURKE FOUNDATION CONVALESCENT HOME, WHITE PLAINS, N.Y.

George Brush. *Superintendent*
Edward J. Lorenze, M.D. *Medical Director*
Anthony De Rosa. *Chief Physical Therapist*

COLUMBIA-PRESBYTERIAN MEDICAL CENTER HOSPITALS, NEW YORK, N.Y.

Alvin J. Binkert. *Executive Vice-President and General Manager*
William Benham Snow, M.D. *Director, Clinical Physical Medicine*
Samuel B. Feitelberg. *Chief Physical Therapist*

HARTFORD REHABILITATION CENTER, HARTFORD, CONN.

Edward Scull, M.D. *Supervising Medical Consultant*
Anne Fayan. *Supervisor, Physical Therapy, Hospital Services*
Lena Wulf. *Supervisor, Education and Physical Therapy, Home Services*

STATE OF CONNECTICUT VETERANS HOME AND HOSPITAL, ROCKY HILL, CONN.

Herman L. Kamenetz, M.D. *Chief, Physical Medicine and Rehabilitation*
Herbert Jones. *Supervisor of Physical Therapy*

INSTITUTE FOR THE CRIPPLED AND DISABLED, NEW YORK, N.Y.

Willis C. Gorthy. *Director*
John Untereker, M.D. *Director of Medical Services*
Blanche Talmud. *Supervising Therapist*

INSTITUTE OF PHYSICAL MEDICINE AND REHABILITATION, NEW YORK UNIVERSITY-BELLEVUE MEDICAL CENTER, NEW YORK, N.Y.

Howard Rusk, M.D. *Director*
Donald A. Covalt, M.D. *Clinical Director*
Jack M. Hofkosh. *Supervisor, Physical Therapy Department*

KESSLER INSTITUTE FOR REHABILITATION, WEST ORANGE, N.J.

William K. Page, Jr. *Administrator*
Henry H. Kessler, M.D. *Medical Director*
Louis Tinghino. *Director of Physical Therapy*

MIDDLESEX REHABILITATION AND POLIO HOSPITAL, NORTH BRUNSWICK, N.J.

Maurice Dorsen, Ph.D. *Administrator*
Norman Reitman, M.D. *Chief of Medical Staff*
Michael R. Sofranko. *Chief Physical Therapist*

NEW YORK HOSPITAL, NEW YORK, N.Y.

Kenneth Archibald, M.D. *Director of Physical Medicine*
Margaret Valentine Rennison. *Supervisor of Physical Therapy*

NEW YORK STATE REHABILITATION HOSPITAL, WEST HAVERSTRAW, N.Y.

Seymour Bluestone, M.D. *Director*
Morton Hoberman, M.D. *Chief, Rehabilitation Services and Research*
Margaret A. O'Neill. *Director, Department of Physical Therapy*

P.S. #85, BRONX, N.Y.

William Benham Snow, M.D. *Medical Director*
Jessie Armolino. *Teacher Coordinator*
Nancy DuBois. *Clinical Coordinator*

ROOSEVELT HOSPITAL, NEW YORK, N.Y.

John Untereker, M.D. *Medical Director*
Cora Alice Taylor. *Chief Physical Therapist*

ST. BARNABAS HOSPITAL FOR CHRONIC DISEASES, BRONX, N.Y.

A.P. Merrill, M.D., M.H.A. *Superintendent*
Robert A. Muller, M.D. *Director, Department of Physical Medicine and Rehabilitation*
Betty Lange. *Chief Physical Therapist*

VETERANS ADMINISTRATION HOSPITAL, BRONX, N.Y.

Abraham M. Kleinman, M.D. *Manager*
Alfred Ebel, M.D. *Chief, Physical Medicine and Rehabilitation Service*
Morris Vogel. *Chief of Physical Therapy*

VETERANS ADMINISTRATION HOSPITAL, BROOKLYN, N.Y.

A. W. Kruger, M.D. *Manager*
Harry H. Samberg, M.D. *Chief, Physical Medicine and Rehabilitation*
Theodore F. Childs. *Chief of Physical Therapy*

VETERANS ADMINISTRATION HOSPITAL, MANHATTAN, N.Y.

William J. Dann. *Manager*
Bernard Stoll, M.D. *Chief, Physical Medicine and Rehabilitation Service*
Aleks Tandyrak. *Chief, Physical Therapy*

VETERANS ADMINISTRATION HOSPITAL, MONTROSE, N.Y.

Leon Rackow, M.D. *Manager*
Jack Meislin, M.D. *Chief, Physical Medicine and Rehabilitation Service*
Henry Stano. *Chief, Physical Therapy*

VETERANS ADMINISTRATION, NEW YORK REGIONAL OFFICE, RAY CLINICS, NEW YORK, N.Y.

Irving Tepperberg, M.D. *Chief, Physical Medicine Rehabilitation Service*
Elmer Marjay, M.D. *Chief, Physical Medicine Group*
G. DiNubila. *Chief Physical Therapist*

VISITING NURSE SERVICE OF NEW YORK, N.Y.

Mary McCall Tyrie. *Director of Education*
Helen Hennessy. *Orthopedic Consultant; Supervisor of Physical Therapy*

Courses in Occupational Therapy

CHAIRMAN OF THE DEPARTMENT OF PHYSICAL MEDICINE AND REHABILITATION:

Robert C. Darling, M.D.

MEDICAL DIRECTOR: William Benham Snow, M.D.

DIRECTOR: Marie Louise Franciscus, M.A.

ASSOCIATE DIRECTOR: Martha E. Schnebly, B.S.

Occupational therapy is the administration of medically prescribed treatment in the form of supervised activity for persons injured in body or mind by accident or disease. Creative and manual arts, recreational activities, educational pursuits, prevocational exploration, and the activities of daily living are used in occupational therapy programs to improve physical function and to promote mental, social, and economic adjustment of the patient. Occupational therapy plays an integral part in modern rehabilitation programs for the mentally or physically ill.

Two programs of study are offered at Columbia. The first, which leads to the Bachelor of Science degree, consists of sixteen months of theoretical education and nine months of clinical practice. The second, which leads to the Certificate of Proficiency, consists of eight months of theoretical education and nine months of clinical practice. See "Admission Requirements" below.

In both programs, classroom work is devoted to courses in the biological, social, and clinical sciences providing a scientific, medical, and theoretical background. At the same time instruction is given in the techniques of creative and manual arts, activities of daily living, recreational, educational, and prevocational activities as they enter into the actual practice of occupational therapy. Correlated with theoretical classroom instruction, students observe treatment procedures in the occupational therapy units of several hospitals and institutions of the metropolitan area. A program of student clerkships in conjunction with the same institutions permits students to study treatment problems of specific diagnostic classifications as they are introduced in the medical lecture series, by means of the case study and laboratory method. In addition, there is a nine-month period of clinical practice in teaching hospitals under the supervision of the University.

The courses described in this bulletin meet the requirements set forth by the American Occupational Therapy Association and by the Council on Medical Education and Hospitals of the American Medical Association, as published in their *Essentials of an Acceptable School of Occupational Therapy*, which regulates the standards by which schools are accredited. Graduates of both the degree program and the certificate program are eligible for the examination leading to admission to the Registry of Occupational Therapists maintained by the American Occupational Therapy Association. This examination is held throughout the country in January and June of each year. Admission to the registry is the certification of a therapist to practice.

ADMISSION REQUIREMENTS

Students are admitted only in September. Both men and women are admitted to professional courses, depending upon individual qualifications. Demands made on the physical endurance and emotional stamina of the therapist require a record of good health. Applicants must be graduates of an approved high school or the equivalent. Specific requirements for admission to each of the programs are as follows:

FOR THE DEGREE PROGRAM

The applicant must have completed at least two years of work in a college approved by Columbia University. He must have earned 60 semester credits in liberal arts with a grade of C or better, including a minimum of 6 semester credits in biology (including zoology), chemistry, or physics; 3 semester credits in psychology; 3 semester credits in sociology.

As a guide to the student in planning these first two years of preparation in the liberal arts, it is suggested that he complete 6 semester credits in each of the following fields: English composition, English literature, biology (including zoology), chemistry or physics, psychology, and sociology. The remaining 24 credits might be chosen from such fields as speech, languages, the social and political sciences, and economics.

Transfer credit is usually not allowed either for courses in physical education or for any specific professional courses. A maximum of 12 credits is allowed for courses completed in music and in fine and industrial arts.

FOR THE CERTIFICATE PROGRAM

The applicant must hold a Bachelor's degree acceptable to Columbia University or, exceptionally, he must have graduated from an accredited professional school in a field closely related to occupational therapy. The work for the Bachelor's degree must include 6 semester credits in biology (including zoology), chemistry, or physics; 6 semester credits in psychology; and 3 semester credits in sociology.

ADMISSION PROCEDURE

Forms to be used in making application for admission may be obtained by writing to the Occupational Therapy Office, College of Physicians and Surgeons, 630 West 168th Street, New York 32, N. Y. Applications should be filed several months in advance of the time at which students wish to begin their studies. The completed form must be accompanied by the application fee: \$10 if the application is received before July 1, 1960; \$15 if the application is received on or after July 1, 1960. This fee is not returnable and is not credited toward tuition.

Transcripts of all post-secondary school education should be forwarded by the registrars of the respective schools directly to the Director of Courses in Occupational Therapy. A personal interview will be arranged for each applicant.

Officers of Instruction

Michael Antell. *Adjunct Assistant Professor of Public Health Practice*

M.D., Long Island College of Medicine; M.P.H., Harvard

Eleanor Bowen Berry, O.T.R. *Assistant in Occupational Therapy*

A.B., Hiram; M.A., Certificate in Occupational Therapy, Columbia

Shivaji B. Bhonslay. *Instructor in Surgery*

M.D., American University, Beirut

Signe Brunnstrom. *Instructor in Physical Therapy*

B.S., Uppsala College, Sweden; M.A., New York University; Physical Therapy, Royal Gymnastic Central Institute, Sweden

Lee H. Cairns. *Instructor in Physical Therapy*

A.B., Smith; Certificate in Physical Therapy, Columbia

Mary E. Callahan. *Associate Professor of Physical Therapy*

B.S., New York University; M.A., Columbia; Graduate, Clinton Hospital School of Nursing; Certificate in Physical Therapy, Posse Institute

Shu Chien. *Assistant Professor of Physiology*

M.B., National Taiwan; Ph.D., Columbia

Graham Clark. *Assistant Professor of Clinical Ophthalmology*

B.S., M.D., Virginia

Frederick S. Craig. *Assistant Professor of Clinical Orthopedic Surgery*

M.D., Buffalo

Robert C. Darling. *Professor of Physical Medicine and Rehabilitation*

A.B., M.D., Harvard

Adelaide A. Deutsch, O.T.R. *Instructor in Occupational Therapy*

B.S. in Occupational Therapy, New York University; M.A., Columbia

Ruth Dickinson. *Assistant Professor of Physical Therapy*

B.S., Russell Sage; M.A., Certificate in Physical Therapy, Columbia

Herbert O. Eftman. *Associate Professor of Anatomy*

A.B., M.A., California; Ph.D., Columbia

Dorothy H. Ericson, O.T.R. *Associate in Occupational Therapy*

B.S. in Occupational Therapy, Kansas; M.A., Columbia

Patricia N. Farnsworth. *Assistant in Physiology*

A.B., Morningside; M.S., Columbia

Gail S. Fidler, O.T.R. *Associate in Occupational Therapy*

A.B., Lebanon Valley College; Graduate, Philadelphia School of Occupational Therapy

Marie Louise Franciscus, O.T.R. *Associate Professor of Occupational Therapy*

B.S., Ohio State; M.A., Columbia; Graduate, Philadelphia School of Occupational Therapy

Edward J. Frey. *Lecturer in Graphic Arts, School of General Studies*

Alfred Gallinek. *Associate in Neurology*
M.D., Berlin

Morton Hoberman. *Associate Clinical Professor of Physical Medicine and Rehabilitation*
B.S., New York University; M.B., M.D., Wayne

Paul Lindenberg. *Instructor in Otolaryngology*
M.D., Vienna

Yasha Lisenco. *Instructor in Fine and Industrial Arts, Teachers College*
B.S., College of the City of New York; M.A., Columbia

Melvin Loos. *Adjunct Professor of Graphic Arts, School of General Studies*
Manager, Printing Office, Columbia University Press

Robert A. Lowe. *Instructor in Fine and Industrial Arts, Teachers College*
A.B., Princeton; M.A., Columbia

David R. Lyons. *Instructor in Psychiatry*
A.B., M.D., George Washington

Charles R. Noback. *Associate Professor of Anatomy*
B.S., Cornell; M.S., New York University; Ph.D., Minnesota

John F. O'Connor. *Instructor in Psychiatry*
B.S., Columbia; M.D., State University of New York

Isabel Robinault, O.T.R. *Associate in Occupational Therapy*
A.B., Barnard; M.A., Certificate in Occupational Therapy, New York University; Ph.D., Columbia

Martha E. Schnebly, O.T.R. *Assistant Professor of Occupational Therapy*
B.S., Maryland State Teachers College; Certificate in Occupational Therapy, Columbia

Daniel Sciarra. *Associate Professor of Clinical Neurology*
A.B., M.D., Harvard

William Benham Snow. *Professor of Physical Medicine*
M.D., Long Island

Blanche Talmud. *Instructor in Physical Therapy*
B.S., Certificate in Physical Therapy, New York University

Alice R. Trei, O.T.R. *Instructor in Occupational Therapy*
B.S., New York University; Certificate in Occupational Therapy, Columbia

Thelma L. Wellerson, O.T.R. *Instructor in Occupational Therapy*
B.S. in Occupational Therapy, M.A., Columbia

John A. Wood. *Assistant in Medicine*
A.B., M.D., Harvard

SPECIAL LECTURERS

Marguerite Abbott, O.T.R. *Director, Curriculum Study Project, American Occupational Therapy Association*
B.S., Tufts; M.A., Columbia; Graduate, Boston School of Occupational therapy

Sophia R. Ackerman, O.T.R. *Chief, Occupational Therapy, New York Veterans Administration Hospital*
B.S., Certificate in Occupational Therapy, New York University; M.A., Columbia

- Lottie I. Barth, O.T.R. *Director of Occupational Therapy, Montefiore Hospital*
B.S., Certificate in Occupational Therapy, New York University
- Edith H. Brokaw, O.T.R. *Consultant in Occupational Therapy*
Graduate, Philadelphia School of Occupational Therapy
- Harold Chenven. *Chief Clinical Psychologist, Institute for the Crippled and Disabled*
A.B., Brooklyn; M.A., Ph.D., New York University
- Marjorie Fish, O.T.R. *Executive Director, American Occupational Therapy Association*
A.B., Swarthmore; M.A., Columbia; Graduate, Boston School of Occupational Therapy
- Charles Goldstine. *Director, Prosthetic and Orthopedic Appliance Shop, Institute for the Crippled and Disabled*
- Willis C. Gorthy. *Director, Institute for the Crippled and Disabled*
C.E., Cornell
- Jack Granofsky. *Assistant Professor of Psychology, Hofstra*
A.B., Brooklyn; M.A., New York University; Ph.D., Yeshiva
- Margery Gross. *Chief, Cerebral Palsy Clinic, Institute for the Crippled and Disabled*
A.S., New Haven Junior College; Certificate in Physical Therapy, Hospital for Special Surgery
- Margarette N. Helmle. *Formerly Director, Rehabilitation Service, Brooklyn Tuberculosis and Health Association*
- Shulamith Kastein. *Speech Pathologist, Department of Otolaryngology, Columbia-Presbyterian Medical Center*
Diploma, Vienna
- Virginia Kilburn, O.T.R. *Director of Education, American Occupational Therapy Association*
A.B., Wellesley; M.A., Certificate in Occupational Therapy, Columbia
- Eleanor C. Kille, O.T.R. *Director of Occupational Therapy, Ancora State Hospital*
A.B., New York University; Graduate, Philadelphia School of Occupational Therapy
- Adam Munz. *Clinical Psychologist, Cerebral Palsy Clinic, Presbyterian Hospital*
A.B., Hunter; M.A., New York University
- Sylvia Nachmani. *Chief Social Worker, Institute for the Crippled and Disabled*
B.S., M.A., New York University; Certificate, New York School of Social Work
- Agnes D. Ness, O.T.R. *Teacher, Vocational Department, Lexington School for the Deaf*
B.S., Certificate in Occupational Therapy, New York University; M.A., Columbia
- Jay O'Brien. *Director, Vocational Evaluation and Guidance Unit, Institute for the Crippled and Disabled*
B.S., Ohio State
- Janet Pinner. *Director of Selective Placement Service, New York State Employment Service*
A.B., Adelphi
- Charles Ritter. *Consultant, Special Aids and Appliances, American Foundation for the Blind*

Bernard Rosenberg. *Director, Vocational Rehabilitation Services, Institute for the Crippled and Disabled*
M.A., Long Island University

Theresa Satina, O.T.R. *Director, Pediatric Occupational Therapy, New York Hospital*
B.S. in Occupational Therapy, Milwaukee-Downer

Cecilia Sattely, O.T.R. *Chief Occupational Therapy, Bronx Veterans Administration Hospital*
B.S. in Occupational Therapy, New York University

Morton Seidenfeld. *Director of Psychological Services and Public Education, National Foundation*
B.S., Washington; M.S., Ph.D., Pennsylvania

Frances L. Shuff, O.T.R. *Administration Program Coordinator and Executive Assistant, Bronx Municipal Hospital Center*
A.B., Skidmore; M.A., Certificate in Occupational Therapy, New York University

Mildred A. Spargo, O.T.R. *Director, Occupational Therapy, Payne Whitney Psychiatric Clinic of New York Hospital*
Graduate, Boston School of Occupational Therapy

Emil Trapani. *Director, Industrial Rehabilitation Service, Institute for the Crippled and Disabled*

Elizabeth M. Wagner, O.T.R. *Occupational Therapy Consultant, The National Society for Crippled Children and Adults, Inc.*
Graduate, Philadelphia School of Occupational Therapy

Sol Warren. *State Coordinator of Internship Training, Division of Vocational Rehabilitation, New York State Department of Education*
B.S., Brooklyn; M.A., Columbia; Ph.D., New York University

Donald Wilson. *Secretary-General, International Society for the Welfare of Cripples*
A.B., Muskingum; LL.B., Western Reserve; M.A., Chicago

Program of Study

The University reserves the right to withdraw or modify the courses of instruction or to change the instructors as may be necessary.

► DEGREE PROGRAM

The degree program includes two academic years (sixteen months) of theoretical and technical study on the campus and nine months of clinical practice. The utilization of summer periods for hospital experience enables the student to complete the full program in approximately two calendar years. The clinical practice consists of full-time practical experience under the immediate direction of registered occupational therapists in psychiatric, general, pediatric, orthopedic, and tuberculosis services or hospitals. During the practice periods students also attend lectures, clinics, and staff meetings; they are introduced to related treatment departments and conduct case studies. Clinical practice must be completed within one year after the academic work is completed.

For electives, students should consult the bulletins of Teachers College and the School of General Studies.

The program is summarized in outline form on page 26.

JUNIOR YEAR: AUTUMN TERM

***O.T. Theory 11. Orientation to occupational therapy**

Professor Franciscus and special lecturers. 1 or 2 points.

A general survey of the field. The present uses, techniques, and philosophies of occupational therapy, with special reference to the roles of the therapist, to professional organizations, and to historical background and recent developments. Supplementary reading and reports. Orientation visits to hospital services.

Pathology 31. Elementary studies in pathology

Instructor to be announced. 1 point.

Lectures to outline the basic alterations which occur in body tissues due to injury and disease; alterations of function resulting from these influences.

Psychology 41. Child development

Dr. Lyons. 2 points.

The mental, motor, social, and emotional development of the child. Special attention is given to a consideration of stress situations encountered by the child and his methods of handling them.

***Physiology 55 or 157. Human physiology**

Professor Chien and Mrs. Farnsworth. 2 points.

A comprehensive discussion of the major organ systems of the human body and their functions, with emphasis on the physiology of exercise. Students with a minimum background of course work in biology, chemistry, and physics register for *Physiology 55*. Those who have had a comprehensive physiology course and considerable course work in biology, chemistry, and physics register for *Physiology 157*.

Neuroanatomy 95. Anatomy of the nervous system

Professor Sciarra. 2 points.

The anatomy of the nervous system of man, including the structural unit, the cerebrospinal system, and the autonomic system. Attention will be given to the gross divisions of the brain, spinal cord, and peripheral nerves, with particular emphasis on the controls affecting voluntary motion.

***Anatomy 155. Human anatomy**

Professors Elftman and Noback. 3 points.

Anatomy of the human body, with emphasis on those features which are most important for muscular activity. Instruction is given by means of lectures and laboratory work, the latter based on prepared dissection of the human body.

O.T. Fine Arts 11. Needlecrafts

Miss Ericson and Mrs. Berry. 2 points.

This course includes instruction in clothing construction, pattern alteration, hand and machine sewing. Also included are the various forms of embroidery, canvas stitchery, appliqué, knitting, and crocheting. Materials charge.

O.T. Fine Arts 101. Fundamentals of art and design

Mr. Lisenco. 2 points.

A general survey course in the arts, which stresses the fundamentals of design as applied to crafts, commercial design, drawing, and painting. Museum and store visits. Lectures, readings, and discussions. Materials charge.

O.T. Fine Arts 163. Elementary woodwork

Mr. Lisenco. 2 points.

This course is designed to orient the student to the fundamental principles of woodworking with hand tools. Careful workmanship and strong construction are stressed. Materials charge.

JUNIOR YEAR: SPRING TERM***O.T. Theory 12. Application in major medical fields**

Professor Franciscus and special lecturers. 2 points.

This course stresses the principles and practice of occupational therapy techniques as applied to the tuberculous, to the mentally ill, and to patients with medical and surgical diagnoses. Supplementary readings and reports. Field visits.

***Psychiatry 102. Elementary psychiatry**

Dr. O'Connor, Mr. Munz, and others. 2 or 3 points.

Etiology and symptomatology of the major and minor psychoses, including the psychoneuroses and their treatment, presented through lectures and clinical demonstrations. Work for the third point includes a survey of psychological tests and measurements, and interpretation of their results for the physical and occupational therapist.

***Neurology 106. Clinical neurology**

Dr. Gallinek. 2 points.

Etiology, symptomatology, and treatment in diseases of the brain, spinal cord, and peripheral nerves.

O.T. Fine Arts 14. General crafts

Miss Ericson and Mrs. Berry. 1, 2, or 3 points.

This course includes many of the smaller crafts, such as cord knotting, chip carving, reed work, copper tooling, wood carving, fly tying, and plastic fabrication. Emphasis is placed on basic techniques and their use in occupational therapy. Museum visit. Materials charge.

***O.T. Fine Arts 26. Pottery**

Mr. Lowe. 2 points.

An introduction to the possibilities and methods of using clay to create functional pottery with coils, with the potter's wheel, and by casting. Moldmaking, methods of decorating and glazing, and firing of kilns are studied for practical use in teaching. Materials charge.

O.T. Fine Arts 30. Elementary weaving

Miss Ericson and Mrs. Berry. 3 points.

A course in basic two- and four-harness weaving, with emphasis on the mechanics of weaving and the application to occupational therapy situations. Small-appliance weaving techniques are also covered. Materials charge.

O.T. Clerkship 2. Case evaluations of psychiatric patients

Mrs. Fidler (coordinator). 2 points.

Correlation of instruction in psychology, psychiatry, and occupational therapy theory by assigned patient work-ups in occupational therapy units. A rotating clinical schedule is assigned each student. Each session is followed by a seminar discussion. Required written reports and field trips.

Elective in recreation (2 points).

Administration and techniques.

SENIOR YEAR: AUTUMN TERM**O.T. Theory 21. Departmental organization and administration**

Professor Schnebly and special lecturers. 2 points.

Study of departmental organization and administration in the various medical fields. The techniques of application of occupational therapy in geriatrics and pediatrics are included in this course. Supplementary reading, reports, and field trips.

***Clinical Subjects 101. General medicine and surgery**

Drs. Wood and Bhonslay. 2 points.

General medicine (Dr. Wood): a survey of the more common diseases, with emphasis on pulmonary tuberculosis and cardiac disorders. Lectures deal primarily with the relationship of pathological physiology to the development of signs and symptoms of disease. *General surgery* (Dr. Bhonslay): a survey of those common diseases for which there is surgical emphasis.

***Kinesiology 105. Applied anatomy and kinesiology**

Miss Brunnstrom and others. 2 points.

Application of knowledge of gross anatomy of skeletal and muscular systems to mechanics of bodily movement. Analysis of skills used in daily activities and other activities in physical and occupational therapy. Lectures and laboratory.

***Rehabilitation 115. Occupational analysis and prevocational evaluation**

Dr. Granofsky and Mr. O'Brien. 1 or 2 points.

An orientation to a variety of occupational situations and to the physical, mental, and emotional demands made on the worker. Analyses are made of industrial processes and the duties of the home-maker, and consideration is given to the principles of energy conservation. The place of occupational therapy in prevocational exploration and evaluation is discussed. Films and field visits.

***O.T. Fine Arts 105 or 106. Interpretive design**

Miss Ericson and Mrs. Berry. 2 points.

A course in which the principles of design are applied to occupational therapy media, such as block printing, stenciling, silk screening, and cardboard construction. Museum visit. Materials charge.

O.T. Fine Arts 165. Advanced woodwork

Mr. Lisenco. 2 points.

This course is a continuation of *O.T. Fine Arts 163* and includes an introduction to the uses of power machinery. Materials charge.

***O.T. Graphic Arts 1 or R1. Art of hand printing**

Professor Loos and Mr. Frey. 1 or 2 points.

The fundamentals of printing, including instruction in type faces, proofreading, and presswork. The laboratory affords practical application of hand typesetting and operation of hand and foot presses. Films, demonstrations, and field trips.

O.T. Clerkship 3. Physical and vocational rehabilitation

Professor Franciscus (coordinator). 2 points.

A study of the roles and contributions of the various professional disciplines and the interrelationships of the patient service departments in a rehabilitation center. Through observation of, and active participation in, patient treatment, by attendance at clinical staff conferences and a weekly class seminar, and by written reports, students are guided to an understanding of the breadth of problems confronting the disabled and the many skills and disciplines available to help in overcoming them.

Elective in group development (2 points).

SENIOR YEAR: SPRING TERM

***O.T. Theory 24. Application to orthopedic and neurological disabilities**

Professor Schnebly, Miss Wellerson, and guest instructors. 2 points.

Lecture and laboratory course in application of techniques in treatment of physical injuries and diseases including orthopedic and neurological disabilities. Demonstration and return demonstration by the student.

***Clinical Subjects 102. Orthopedics**

Professor Craig. 2 points.

Lectures and clinical presentations descriptive of orthopedic conditions, including discussion of related problems—social, medical, surgical, and rehabilitation.

Exercise 112. Therapeutic exercise

Professors Snow, Darling, Hoberman, and associates. 2 to 5 points.

The basic principles of therapeutic exercise including the physiology of exercise, muscle evaluation and re-education, and tests and measurements. Lectures and laboratory.

***Rehabilitation 118. Agencies and personnel in rehabilitation**

Professors Schnebly (coordinator), Antell, and Clark, and special lecturers. 2 points.

Lectures concerning community resources for the physical, psychological, social, and vocational rehabilitation of the handicapped. An orientation to preventive medicine and public health problems, including communicable and contagious diseases. Legislation and organization of both public and private health agencies are studied. Included is consideration of some of the more common pathologies affecting vision and hearing, and rehabilitation techniques.

Rehabilitation 126. Activities of daily living

Miss Ericson. 2 points.

A laboratory course to acquaint the student with some of the materials, equipment, and techniques to aid the handicapped in attaining maximum self-sufficiency. Consideration is given to the needs of persons with motor, sensory, and emotional handicaps, as well as energy conservation techniques for the cardiac and tuberculous. Also includes experience in making functional splints. Materials charge.

***O.T. Fine Arts 17 or 18. Leatherwork**

Miss Ericson. 1 or 2 points.

A course in hand leatherwork. Techniques of decoration and construction of small projects as used in occupational therapy. Materials charge.

***O.T. Fine Arts 168. Metalwork and jewelry**

Mr. Lisenco. 2 points.

A course in the basic techniques of hammered metal and jewelry. Elementary principles of mechanical drawing. Materials charge.

O.T. Clerkship 4. Case evaluation of medical and surgical patients

Miss Ericson (coordinator). 2 points.

Correlation of instruction in medicine, surgery, pediatrics, and occupational therapy theory by assigned patient work-ups in occupational therapy units and ward situations. A rotating clinical schedule is assigned each student. Each session is followed by a seminar discussion. Written reports and field trips.

Elective (2 points).

► CERTIFICATE PROGRAM

The certificate program is completed in seventeen months. The eight months of theoretical and technical study consists of the *starred courses* listed under the degree program plus those given below. Clinical practice of at least nine months is the same as described for degree candidates except that in addition the certificate candidate must write a paper on an area which is of particular interest to him and which is related to clinical experiences.

The program is summarized in outline form on page 26.

ADDITIONAL AUTUMN-TERM COURSES

O.T. Fine Arts 15. General crafts and needlecrafts

Miss Ericson and Mrs. Berry. 1, 2, or 3 points.

The general crafts section of this course includes cord knotting, chip carving, reed work, copper tooling, fly tying, and plastic fabrication. The needlecraft section includes hand and machine sewing, embroidery, knitting, crocheting, appliqué, and rug hooking. Emphasis is placed on the application to occupational therapy situations. Materials charge.

O.T. Fine Arts 17. Leatherwork

Miss Ericson. 1 point.

For description, see listing above under spring term, senior year.

O.T. Fine Arts 35. Elementary weaving

Miss Ericson and Mrs. Berry. 2 points.

For description, see listing above under spring term, junior year.

O.T. Fine Arts 167. Woodwork

Mr. Lisenco. 2 points.

A course designed to orient students in the fundamentals of woodworking and to develop a reasonable skill in the use of hand tools and finishing processes. An introduction to the use of power tools. Materials charge.

ADDITIONAL SPRING-TERM COURSES

O.T. Fine Arts 106. Interpretive design

Miss Ericson and Mrs. Berry. 2 points.

For description, see listing under autumn term, senior year, above.

O.T. Graphic Arts R1. Art of hand printing

Professor Loos and Mr. Frey. 2 points.

For description, see listing under autumn term, senior year, above.

During the spring term, candidates must also attend a weekly seminar, in which advanced theory, principles, and practice of occupational therapy are discussed.

► POSTGRADUATE COURSE IN KINESIOLOGY

Kinesiology 205 (spring term).

Miss Brunnstrom. Saturday, 10–12. 2 points.

Registration only by permission of the instructor. Minimum class, ten; maximum class, twenty.

An advanced course designed for occupational therapists, physical therapists, and physicians who are graduates of professional schools acceptable to Columbia University. Review and discussion of selected readings from the works of outstanding classical anatomists, recent electromyographic findings elucidating principles of erect standing, fundamentals of locomotion, and introduction to the study of the motor behavior of patients with upper motor neuron lesions. Application to therapeutic procedures will be stressed.

Further information and application forms are available from the Office of Postgraduate Courses, College of Physicians and Surgeons, 630 West 168th Street, New York 32, N. Y.

Outline of the Program

DEGREE PROGRAM: 73 POINTS

JUNIOR YEAR: AUTUMN TERM

O.T. Theory 11	2
Pathology 31	1
Psychology 41	2
Physiology 55 or 157	2
Neuroanatomy 95	2
Anatomy 155	3
O.T. Fine Arts 11	2
O.T. Fine Arts 101	2
O.T. Fine Arts 163	2
Total points	18

SENIOR YEAR: AUTUMN TERM

O.T. Theory 21	2
Clinical Subjects 101	2
Kinesiology 105	2
Rehabilitation 115	2
O.T. Fine Arts 105	2
O.T. Fine Arts 165	2
O.T. Graphic Arts 1	2
O.T. Clerkship 3	2
Elective	2
Total points	18

JUNIOR YEAR: SPRING TERM

O.T. Theory 12	2
Psychiatry 102	3
Neurology 106	2
O.T. Fine Arts 14	3
O.T. Fine Arts 26	2
O.T. Fine Arts 30	3
O.T. Clerkship 2	2
Elective	2
Total points	19

SENIOR YEAR: SPRING TERM

O.T. Theory 24	2
Clinical Subjects 102	2
Exercise 112	2
Rehabilitation 118	2
Rehabilitation 126	2
O.T. Fine Arts 18	2
O.T. Fine Arts 168	2
O.T. Clerkship 4	2
Elective	2
Total points	18

CLINICAL PRACTICE:

IN PSYCHIATRY: in June, July, and August between the junior and senior years.

IN SPECIFIED AREAS OF SERVICE: from July to January after completion of the senior year.

CERTIFICATE PROGRAM: 38 POINTS

AUTUMN TERM

O.T. Theory 11	1
Physiology 55 or 157	2
Clinical Subjects 101	2
Kinesiology 105	2
Rehabilitation 115	1
Anatomy 155	3
O.T. Fine Arts 15	3
O.T. Fine Arts 17	1
O.T. Fine Arts 35	2
O.T. Fine Arts 167	2
Total points	19

SPRING TERM

O.T. Theory 12	2
O.T. Theory 24	2
Clinical Subjects 102	2
Psychiatry 102	2
Neurology 106	2
Rehabilitation 118	2
O.T. Graphic Arts R1	1
O.T. Fine Arts 26	2
O.T. Fine Arts 106	2
O.T. Fine Arts 168	2
Total points	19

CLINICAL PRACTICE IN SPECIFIED AREAS OF SERVICE: from July to April following completion of the course work.

Hospitals and Agencies Affiliated for Clinical Practice

CHILDREN'S HOSPITAL, BUFFALO, N.Y.

Moir P. Tanner. *Director*

Mitchell I. Rubin, M.D. *Chief of Pediatrics*

Jane E. Fogelsonger, O.T.R. *Director of Occupational Therapy*

CHILDREN'S REHABILITATION INSTITUTE, INC. FOR CEREBRAL PALSY, REISTERSTOWN, MD.

Winthrop M. Phelps, M.D. *Medical Director*

Christopher H. Wiemer. *Executive Director*

Ruth W. Brunyate, O.T.R. *Director of Occupational Therapy*

COLUMBIA-PRESBYTERIAN MEDICAL CENTER HOSPITALS, NEW YORK, N.Y.

Alvin J. Binkert. *Executive Vice-President*

William Benham Snow, M.D. *Director, Clinical Physical Medicine*

Dorothy Mautner, O.T.R. *Chief Occupational Therapist*

CONNECTICUT STATE HOSPITAL, MIDDLETOWN, CONN.

Harry S. Whiting, M.D. *Superintendent*

(Mrs.) Virginia S. Holmberg, O.T.R. *Supervisor of Occupational Therapy*

CURATIVE WORKSHOP, UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA, PA.

George M. Piersol, M.D. *Medical Director*

Clare S. Spackman, O.T.R. *Director*

DELAWARE CURATIVE WORKSHOP, INC., WILMINGTON, DEL.

Eleanor J. Bader, R.P.T. *Executive Director*

Mae D. Hightower, O.T.R. *Chief Occupational Therapist*

DISTRICT OF COLUMBIA HEALTH DEPARTMENT, BUREAU OF MATERNAL AND CHILD HEALTH, WASHINGTON, D.C.

Ella Oppenheimer, M.D. *Chief*

Handicapped and Crippled Children's Unit

Frances Brennecke, M.D. *Chief*

Rena M. Graham, O.T.R. *Director of Occupational Therapy*

HARTFORD REHABILITATION CENTER, INCORPORATED, HARTFORD, CONN.

June Sokolov, O.T.R. *Executive Director*

Edward Scull, M.D. *Supervising Medical Consultant*

Clari Bare, O.T.R. *Supervisor of Occupational Therapy*

INSTITUTE FOR THE CRIPPLED AND DISABLED, NEW YORK, N.Y.

Willis C. Gorthy. *Executive Director*

John Untereker, M.D. *Medical Director*

Thelma L. Wellerson, O.T.R. *Director of Occupational Therapy*

MONTEFIORE HOSPITAL, NEW YORK, N.Y.

Martin Cherkasky, M.D. *Director*

Lottie I. Barth, O.T.R. *Director of Occupational Therapy*

NEWINGTON HOME AND HOSPITAL FOR CRIPPLED CHILDREN, NEWINGTON, CONN.

Berger E. Foss. *Executive Director*

John C. Allen, M.D. *Physiatrist*

Mary Fiorentino, O.T.R. *Director of Occupational Therapy*

NEW YORK HOSPITAL, NEW YORK, N.Y.

Children's Clinic

S. Z. Levine, M.D. *Pediatrician-in-Chief*

Theresa Satina, O.T.R. *Director of Pediatric Occupational Therapy*

Main Hospital

Henry N. Pratt, M.D. *Director*

Kenneth Archibald, M.D. *Director of Physical Medicine*

(Mrs.) Eva M. Seigel, O.T.R. *Director of Occupational Therapy*

NEW YORK STATE DEPARTMENT OF HEALTH

Edward X. Mikol, M.D. *General Director, Tuberculosis Control*

M. Arlene Mellinger, O.T.R. *Supervisor of Occupational Therapy*

Mount Morris Tuberculosis Hospital, Mount Morris, N.Y.

Frank L. Armstrong, M.D. *Medical Director*

Unabelle Emm, O.T.R. *Director of Occupational Therapy*

NEW YORK STATE DEPARTMENT OF MENTAL HYGIENE

Paul H. Hoch. *Commissioner*

(Mrs.) Viola R. McGrath, O.T.R. *Director of Occupational Therapy*

New York State Psychiatric Institute, New York, N.Y.

Lawrence C. Kolb, M.D. *Director*

(Mrs.) Alice R. Trei, O.T.R. *Senior Occupational Therapist*

NEW YORK STATE REHABILITATION HOSPITAL, WEST HAVERSTRAW, N.Y.

Seymour S. Bluestone, M.D. *Director*

Morton Hoberman, M.D. *Chief, Rehabilitation Services and Research*

Viola W. Svensson, O.T.R. *Director of Occupational Therapy*

NORWICH STATE HOSPITAL, NORWICH, CONN.

Ronald H. Kettle, M.D. *Superintendent*

Harry Kromer, R.N., O.T.R. *Supervisor of Occupational Therapy*

THE REHABILITATION CENTER OF SOUTHERN FAIRFIELD COUNTY, INC., STAMFORD, CONN.

Ruby C. Oscarson, R.P.T. *Executive Director*

Charles G. McKendree, M.D. *Medical Director*

Barbara E. Neuhaus, O.T.R. *Director of Occupational Therapy*

U.S. ARMY HOSPITALS

Office of the Surgeon General, Washington, D.C.

Ruth A. Robinson, Col., A.M.S.C. *Chief, Army Medical Specialist Corps*

Cordelia Myers, Lt. Col., A.M.S.C. *Chief, Occupational Therapist Section, Army Medical Specialist Corps*

VETERANS ADMINISTRATION HOSPITALS

Central Office, Washington, D.C.

A.B.C. Knudson, M.D. *Director, Physical Medicine and Rehabilitation Service*

George D. Frye, O.T.R. *Chief, Occupational Therapy Section*

Registration and Expenses

► REGISTRATION

Before attending University courses, each student must register in person during the registration period (see the Academic Calendar, inside front cover). The registration procedure is as follows:

1. The student reports to the Office of Physical and Occupational Therapy on the third floor of the College of Physicians and Surgeons, 630 West 168th Street, and fills out various forms giving information required for University records.
2. He has his program approved by the Director.
3. He takes his completed forms to the Office of the Registrar and pays his fees in the Office of the Bursar.

The Office of the Registrar is open Monday through Friday, 9 a.m. to 5 p.m.

AUDITING COURSES

Degree candidates who have paid full tuition for the current term (\$550) may audit courses in any division of the University without charge. Application is made at the Registrar's Office, 315 University Hall, during the so-called late registration period in each term: Monday, October 3, through Saturday noon, October 8, for the autumn term; Monday, February 13, through Saturday noon, February 18, for the spring term. Applications may not be filed before or after these dates.

The Registrar's Office directs students to the rosters of auditable courses in each division of the University. For obvious reasons, elementary language courses, laboratory courses, and seminars will not be open to auditors. Other courses may be closed because of space limitations. In no case will an audited course appear on the student's record, nor is it possible to turn an audited course into a credit course by paying the fee after the fact.

REGULATIONS

Each person whose registration has been completed will be considered a student of the University during the term for which he is registered unless his connection with the University is officially severed by withdrawal or otherwise. No student registered in any school or college of the University shall at the same time be registered in any other school or college, either of Columbia University or of any other institution, without the specific authorization of the dean or director of the school or college of the University in which he is first registered.

The privileges of the University are not available to any student until he has completed his registration. Since, under the University statutes, payment of fees is part of registration, no student's registration is complete until his fees have been paid.

No student is permitted to attend any University course for which he is not officially registered unless he has been granted auditing privileges. No student may register after the stated period unless he obtains the written consent of the proper dean or director.

ATTENDANCE AND LENGTH OF RESIDENCE

No degree or certificate will be granted to a student who has not registered for and attended at the University courses of instruction equivalent to at least one academic year of full-time work.

Students are held accountable for absences incurred owing to late enrollment and are expected to attend punctually each class or laboratory exercise in each course. For credit toward the certificate or degree, regular attendance is required in addition to the proficiency attested by classwork and examination.

Students whose religious duties conflict at any time with academic requirements should apply to the proper Director for an equitable solution.

A student in good standing may, for reasons of weight, be granted a leave of absence by the Director.

ACADEMIC DISCIPLINE

The continuance of each student upon the rolls of the University, the receipt by him of academic credits, his graduation, and the conferring of any degree or the granting of any certificate are strictly subject to the disciplinary powers of the University, which is free to cancel his registration at any time on any grounds which it deems proper. The disciplinary authority of the University is vested in the President and, subject to his reserved powers, in the dean of each faculty and the director of the work of each administrative board.

GRADES AND CREDITS

The student's performance in a course is reported according to the following grades: A, excellent; B, good; C, fair; and F, failure. A, B, and C are passing grades counting for credit toward the degree or certificate and accepted as the basis for advancement to a higher course. A student who does not receive a mark of C or above in a prescribed course must repeat that course.

The mark MU is not a grade and simply implies that in the opinion of the instructor the student may be given the privilege of taking a special examination. When this mark is given at the end of the autumn term, it does not necessarily mean that the student may not pursue his courses in the spring term, but that he will get no credit for the course in question until he has received a definite passing grade.

► FEES

Tuition, the comprehensive fee, and laboratory deposits are payable each term in advance and as part of registration; the student health and hospital fee for the academic year is payable at registration in September. If these fees are paid after the

last day of registration (see the Academic Calendar), they will not be reduced, and a late fee of \$6.00 will be imposed.

The following fees, prescribed by statute *for each autumn and spring term*, are subject to change at the discretion of the trustees:

Comprehensive fee for students enrolled for:

Less than 12 points	\$ 25.00
Twelve points or more	50.00
With the proviso that in no instance shall the amount of the combined comprehensive fee and tuition be less than	75.00
Registration as engaged only in research	75.00

Tuition for all courses, per point, except where a special fee is fixed	37.00
With the proviso that the fee for a program of 15 or more points is	550.00

Clinical supervisory fee	12.00
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Student health and hospital fee (see below)	37.80
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APPLICATION FEES AND LATE FEES

Application for admission:

If application is received before July 1, 1960	\$10.00
If application is received on or after July 1, 1960	15.00

Application for each special examination	10.00
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Renewal of application for a degree or certificate (see below)	1.00
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Late registration	6.00
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Late application for a special examination	5.00
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Late application, or late renewal of application, for a degree or certificate	5.00
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ACCEPTANCE FEE

Within two weeks after an applicant has been notified that his application has been accepted, he must notify the Director that he intends to matriculate and must accompany his letter with a check or money order for \$50, payable to Columbia University. This acceptance fee will be retained by the University, and if the applicant does not register for the following academic year, it will not be returned unless the University for any reason cancels the acceptance. If he registers in the courses in physical or occupational therapy in the class to which he has been admitted, the amount of the acceptance fee will be deducted from his tuition.

WITHDRAWAL AND REBATES

A student in good academic standing who is not subject to discipline will always be given an honorable discharge if he wishes to withdraw from the University. If he is under twenty-one years of age, his parent or guardian must first give consent in writing to the Director.

The comprehensive fee, the student health and hospital fee, application fees, and late fees are not subject to rebate. If a student withdraws from the School, a partial return of the tuition may be authorized by the Registrar. When a rebate is allowed,

it will be reckoned from the day upon which the Registrar receives written notice from the student.

DEPOSITS

A deposit for the use of lockers, keys, apparatus, material, and the like is required in certain courses.

STUDENT HEALTH AND HOSPITAL FEE

The student health and hospital fee is used to pay the annual premium of the Associated Hospital Service of New York for hospital insurance and to pay part of the cost of the student health service. A student who already carries hospital insurance will be charged \$6.48.

A physical examination (including x-ray and tuberculin tests) will be given each student in the professional courses during the first term of attendance. Further physical examinations will be given during the training period, whenever it is deemed advisable.

A student who requires hospitalization will be taken care of either in the wards of the Medical Center, or elsewhere, under his hospitalization insurance policy.

Daily office hours are held by the Student Health Service, Room 2-220, Vanderbilt Clinic. Members of the Health Service are available to attend ill students if they live near the Medical Center.

APPLICATION OR RENEWAL OF APPLICATION FOR A DEGREE OR CERTIFICATE

A candidate for a degree or certificate must file application by the date specified in the Academic Calendar. If the degree or certificate is not earned by the next regular time for the issuance of diplomas subsequent to the date of filing, the application may be renewed for a fee of \$1.00 each time that the candidate chooses to come up for consideration. Degrees and certificates are awarded three times a year—in October, February, and June.

► ESTIMATED EXPENSES

UNIVERSITY EXPENSES (TOTAL PROGRAM)	DEGREE PROGRAM	CERTIFICATE PROGRAM
Tuition	\$2,200.00	\$1,100.00
Comprehensive fee	200.00	100.00
Clinical supervisory fee	24.00	12.00
Health and hospital fee	75.60	37.80
TOTAL	\$2,499.60	\$1,249.80
LIVING EXPENSES (PER ACADEMIC YEAR)		
Room	\$350-\$535	
Board	550	
Subway and bus fares (within program)	65	
TOTAL	\$965-\$1,150	

The cost of books, materials, equipment, and uniforms varies with the program chosen. In physical therapy, degree candidates will spend, in all, about \$115; certificate candidates, about \$100. In occupational therapy, degree candidates will spend about \$240; certificate candidates, about \$90. Fees for materials and equipment in studio classes are payable at the time of registration and are subject to change in accord with market prices.

During clinical practice, occupational therapy students spend some four months in residence in hospitals where they receive full maintenance (room, board, and laundry). In some instances a maintenance arrangement is possible for a longer period of time. The living expenses of physical therapy students during the summer clinical practice periods will vary depending upon the accommodations provided by the hospitals to which they are assigned.

Students who are assigned to hospitals outside the local area will need to pay nominal transportation expenses.

► HOUSING

All women students under twenty-one years of age who are not living at home or with relatives are required to secure approval of their residence from the Directors. Information concerning desirable accommodations may be obtained from the Physical and Occupational Therapy Office (see also below).

UNIVERSITY RESIDENCE HALLS

Booklets describing the University residence halls on the Morningside campus and application blanks for rooms may be obtained (for men) from the Men's Residence Halls Office, 125 Livingston Hall, Columbia University, New York 27, N.Y., or (for women) from the Johnson Hall Office, 411 West 116th Street, New York 27. Rates for the academic year are \$250 to \$475 for men and \$350 to \$535 for women. Optional prepaid board plans are available in the men's residence halls. In Johnson Hall, the residents are required to take breakfast and dinner there at a cost of \$375 for the academic year.

Assignment of rooms in University residence halls is made by the term. Fees may be paid by the term or month or, if necessary, by the week.

In Woodbridge Hall, at 431 Riverside Drive, are one-bedroom, furnished apartments, which are rented for a twelve-month period to married graduate students. The rates range from \$1,260 to \$1,920 a year, including utilities. For further information and application forms write the Residence Halls Office, 125 Livingston Hall.

OFF-CAMPUS HOUSING

Students who wish to live off campus should write or call at the Registry of Off-Campus Accommodations, 115 Livingston Hall, Columbia University, New York 27, for an information sheet which describes the services rendered by the Registry.

International House, a privately owned student residence near the Morningside campus, has rooms for about five hundred students, both foreign and American. Rates for the academic year are \$355 to \$700. To be eligible for admission a student

must be at least twenty-one years old and must be registered for a minimum of twelve points or for a program of full-time research. Address the Committee on Admissions, International House, 500 Riverside Drive, New York 27.

The King's Crown Hotel, 420 West 116th Street, near the campus, is owned by the University. It provides accommodations at reasonable rates for relatives and guests of members of the University.

► LOANS TO STUDENTS

Students who are interested in applying for loans should first consult the appropriate Director or the Office of Financial Aid, 322 University Hall, Columbia University, New York 27, N. Y., whichever is more convenient. By doing so, they will avoid applying for loans from inappropriate sources and will therefore save considerable time and effort. The Office of Financial Aid can supply further information on all the loan plans and the deferred-payment plan described below.

Long-term loans at low interest rates are available from the University for tuition and fees, and under certain circumstances, for living expenses. Old students are urged to apply well in advance of September 1, for the autumn term, and of December 15, for the spring term. New students may apply through the registration period. All students should file applications for loans with the Office of Financial Aid.

Many states (among them Maine, Massachusetts, New York, and Vermont) have loan funds available to their residents who are United States citizens, and federal loan funds are available to full-time students under the National Defense Student Loan Program (Title II of the National Defense Education Act of 1958).

Deferred payment of all charges payable to the University may be arranged through the Midland Time Plan for Education, sponsored by the Marine Midland Trust Company of New York. This plan permits a student to budget all or part of his tuition and dormitory fees over an eight-month period, paying a portion of the cost on the first of each month. The interest charge is $2\frac{3}{4}$ per cent of the total amount to be budgeted.

► EMPLOYMENT

A student who needs to earn part of his expenses by working part time during the academic year should get in touch with the Student Employment Office, 425 West 117th Street. In order to help him, the Office requires that he file a short registration card and be interviewed by a staff member. Since employers must know when a student is free to work, *little assistance can be given any student until his class schedule is known.* The Office advises most full-time students to limit their part-time work to fifteen or, at the most, twenty hours a week, although in exceptional circumstances students can sometimes work longer hours without damage to their studies.

The Employment Office places students as tutors, translators, clerks, salesmen, waiters, technical workers, secretaries, typists, and the like. Average rates of pay for unskilled work are \$1.20 per hour for campus jobs and \$1.25 per hour for off-campus jobs. Higher rates are paid students with specialized training.

Men students are eligible for work-for-meals jobs in the University dining halls and in the Men's Faculty Club (two hours of work a day in return for three meals). Applications must be filed with the Office by August 1.

Wives of students may also register with the Office for part-time work. Those who are interested in full-time jobs on the campus should apply at the University Personnel Office, Wing C, University Hall Annex; most of these jobs require typing and many require shorthand as well.

Students who wish to work full time during the summer vacation should register with the Student Employment Office early in the spring term.

The Physical and Occupational Therapy Office maintains a listing of positions throughout the country available to graduate therapists. Current graduates and alumni are encouraged to refer to the Office for these positions.

► THE INSTITUTE FOR THE CRIPPLED AND DISABLED

The Institute for the Crippled and Disabled at 400 First Avenue, in cooperation with Columbia University, offers broad clinical and educational facilities for the training of physical therapy and occupational therapy students. There is an outstanding collection of reference books, periodicals, and pamphlets, concerning the handicapped, their problems, and their rehabilitation, which students may use. An occupational therapy teaching unit is used for instruction and contains a skills library. Special equipment for the instruction of kinesiology and for the instruction and laboratory practice of massage and exercise is provided.

► STUDENT ACTIVITIES

The Physical Therapy and Occupational Therapy Clubs are the student organizations in which recreational, social, and professional activities are carried on. Within these clubs each class of students has its own organization and officers with representatives on the University Student Council.

The Columbia University Student Council, composed of elected representatives from the students of the several schools and faculties of the University, represents the students in matters affecting the student body as a whole, with the object of promoting cooperation and understanding among the students, faculty, and administration.

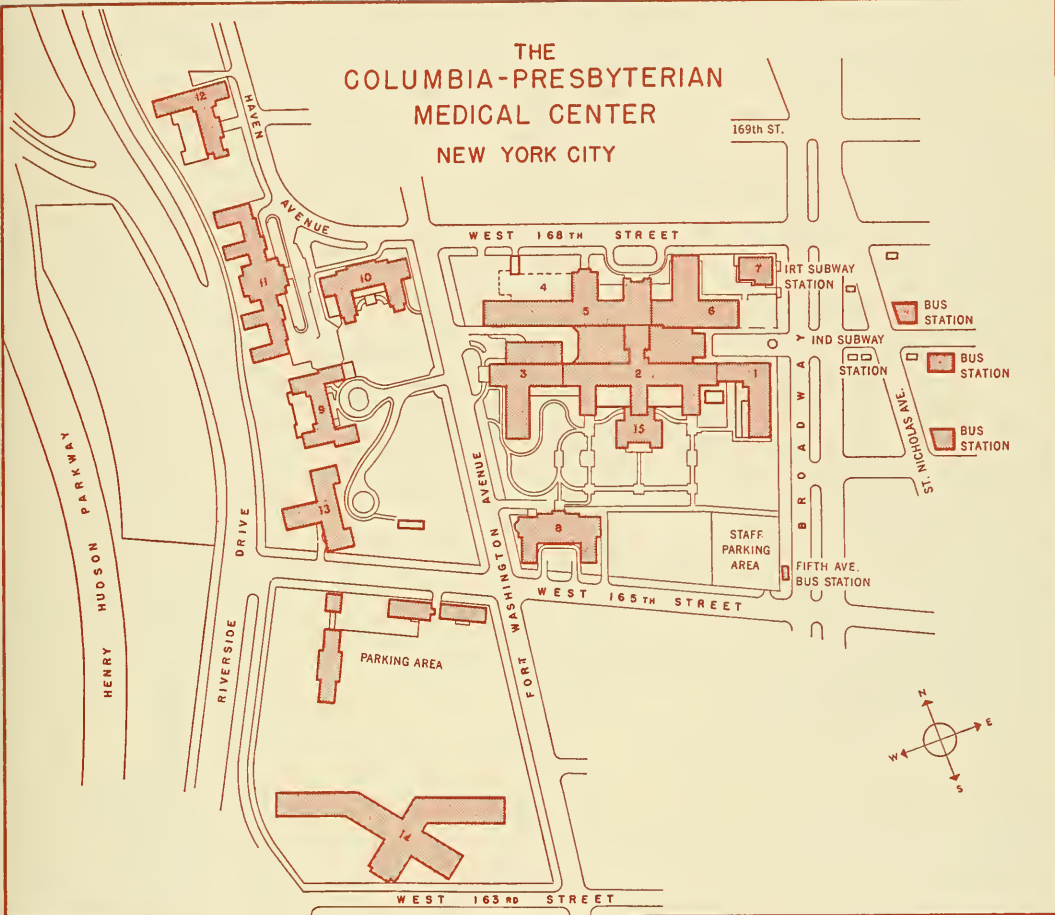
Physical and occupational therapy students are eligible to make use of the facilities of the main campus at Broadway and 116th Street as well as those of the Medical Center. *The Student Handbook*, which is distributed from the school office at registration, gives complete details about the libraries, sports, religious activities, social life on the campus, and the resources of New York City that students may enjoy at little expense.

Graduates of the physical and occupational therapy programs have alumni associations, which are part of the Alumni Federation of Columbia University.



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THE
COLUMBIA-PRESBYTERIAN
MEDICAL CENTER
NEW YORK CITY



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|---|---|
| 1. BABIES HOSPITAL | 7. N. Y. CITY DEPT. OF HEALTH
SCHOOL OF PUBLIC HEALTH AND
ADMINISTRATIVE MEDICINE |
| 2. PRESBYTERIAN HOSPITAL
N. Y. ORTHOPAEDIC HOSPITAL
SLOANE HOSPITAL
SQUIER UROLOGICAL CLINIC | 8. INSTITUTE OF OPHTHALMOLOGY |
| 3. HARKNESS PAVILION | 9. MAXWELL HALL |
| 4. POWER HOUSE | 10. NEUROLOGICAL INSTITUTE |
| 5. COLLEGE OF PHYSICIANS AND SURGEONS | 11. N. Y. STATE PSYCHIATRIC INSTITUTE |
| 6. VANDERBILT CLINIC
SCHOOL OF DENTAL AND ORAL SURGERY | 12. BARD HALL |
| | 13. HARKNESS MEMORIAL HALL |
| | 14. FRANCIS DELAFIELD HOSPITAL, N.Y.C. |
| | 15. PAULINE A. HARTFORD MEMORIAL CHAPEL |

